

REMARKS

1. In response to the final Office Action mailed September 26, 2007, Applicants respectfully requests reconsideration. Claims 1-20 were previously presented in the application. In the outstanding Office Action, all claims have been rejected. By the foregoing Amendments, independent claims 1, 15 and 20 have been amended; and claims 12-14 have been canceled. Thus, upon entry of this paper, claims 1-11 and 15-20 will be pending in this application. Based on the above Amendments and following Remarks, Applicants respectfully request that all outstanding objections and rejections be reconsidered, and that they be withdrawn.

Claim Rejections under 35 U.S.C. §102

2. Claims 1-12 have been rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent Publication No. US 3003/0195959 (Labadie et al). Based upon the above Amendments and following Remarks, Applicants respectfully request reconsideration and withdrawal of these rejections.

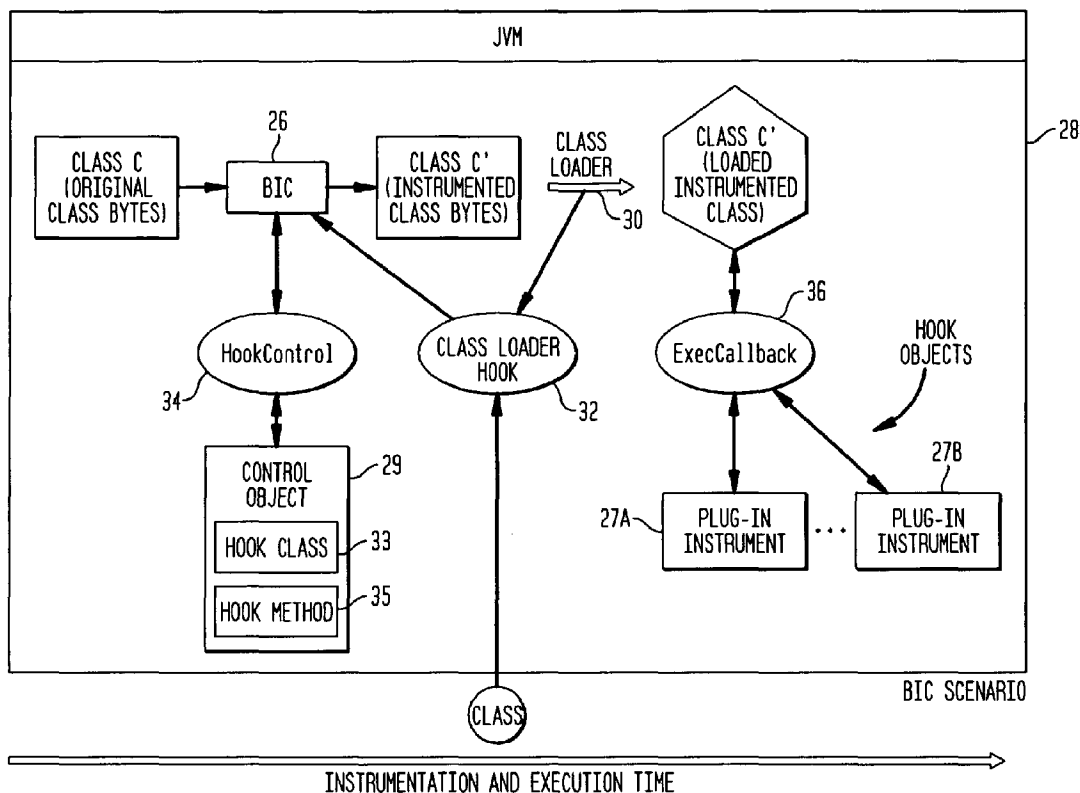
3. Independent claims 1, 16 and 20 have been amended to clarify the invention. In particular, independent claim 1 has been amended to recite:

- installing an instrument hook prior to execution of the selected transaction;
- instrumenting said selected transaction upon execution of the selected transaction using one or more plug-in instruments called by the instrument hook;
- initiating said top level transaction in response to a request received from a web server;
- transmitting a cookie from said web server to said application server together with said request;
- generating correlators for identifying said top level transaction and a parent transaction, if any, upon execution of each of said instrumented transactions;
- utilizing said cookie for the correlator identifying said top level transaction; and
- utilizing said correlators to cross-correlate a performance metric corresponding to a parent transaction with one or more performance metrics corresponding to one or more child transactions of said parent transaction,
- wherein the one-or more plug-instruments implement an interface that communicates data for the performance metric.

Independent claims 15 and 20 have been similarly amended. Support for the amendments is provided by the original specification and figures. In particular, **FIG. 2** as shown below and

the original specification disclose a system that includes a bytecode instrumentation engine that can be utilized to modify the bytecode associated with a Java application at any time prior to, or during, the loading and initialization of the bytecode by a Java virtual machine (JVM).

FIG. 2



Further, FIG. 2 illustrates a class loader hook control interface 32 that invokes the BIC instrumentation tool 26 to determine/identify whether any methods of the exemplary class C need to be instrumented. The BIC instrumentation tool 26 in turn determines whether any method(s) of class C is(are) slated for bytecode modification by communicating with a first interface 34 (i.e., a Hook Control interface) that directs the bytecode modification process. More particularly, the Hook Control interface 34 allows a user to identify selected classes or interfaces, and selected methods associated with these classes, for instrumentation; and the

ExecCallback interface **36** enables various types of monitoring tools to be plugged-in to a second interface and receive information when classes are executed.

4. Further, the original specification discloses that an ARM agent **48** can be invoked by the ExecCallback interface **36** (e.g., see **FIG. 2**) at the start of the instrumented transaction and that the ExecCallback interface **36** will generate a correlator associated with a Transaction A, and will store this correlator, referred to as correlator A, in one location of a stack associated with the JTL **64**.

5. Moreover, the original specification discloses that upon transmission of a request from a web browser to the web server, the script can inform the web server of the presence of a client monitor on the browser and that, in response, the web server can transmit a top-level correlator to the browser, for example, in the form of a cookie.

6. In consideration of the discussion above, it is respectfully submitted that the amendments are clearly supported by the original specification and figures and thus, raise no questions of new matter.

7. Labadie et al. discloses a framework for managing data that provides correlation information in a distributed computing system (DCS).¹ As shown in **FIG. 2** below, Labadie et al. discloses a client/server system **122/124**; and DCS provider plug-ins **130/152** for a

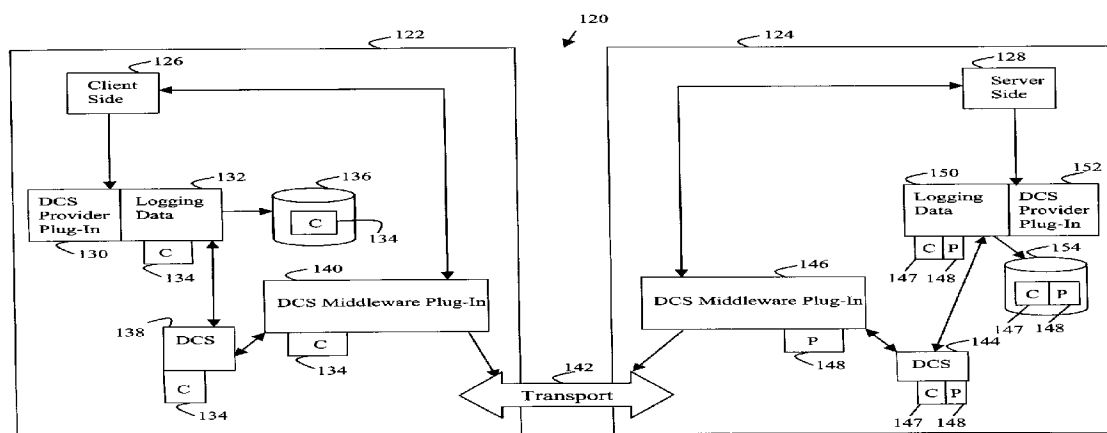


Fig. 2

client/server side components **126/128**, wherein the logging data artifact **132/150** for the client/server **122/124** includes DCS correlators **134/147**. Further, Labadie et al. discloses

¹ Labadie et al. at ABSTRACT.

provider plug-ins **130/152** logging data artifacts **132/150** are further coupled to DCS services **138/144** *which generate, store and provide the DCS correlators **134/147** when invoked by provider plug-ins **130/152** or transport plug-ins*, such as DCS Middleware plug-ins **140/146** (emphasis added). Furthermore, Labadie et al. discloses that, when transport plug-ins **140/146** receive an inbound network communication including correlators **134/147**, *the correlators **134/147** are removed and passed to the respective DCS services **138/144***, which the transport plug-ins **140/146** are coupled with, in order that the DCS services **138/144** may associate the inbound correlator **134** as a partner correlator **148** for a correlator generated by the DCS service **144**. That is, Labadie et al. discloses the respective DCS Services, provider plug-ins and transport plug-ins for each particular application provide a framework for managing data providing correlator information.

8. However, Labadie et al. nowhere discloses as amended claim 1 recites:

installing an instrument hook prior to execution of the selected transaction;
instrumenting said selected transaction upon execution of the selected transaction using one or more plug-in instruments called by the instrument hook;
initiating said top level transaction in response to a request received from a web server;
transmitting a cookie from said web server to said application server together with said request;
generating correlators for identifying said top level transaction and a parent transaction, if any, upon execution of each of said instrumented transactions;
utilizing said cookie for the correlator identifying said top level transaction; and
utilizing said correlators to cross-correlate a performance metric corresponding to a parent transaction with one or more performance metrics corresponding to one or more child transactions of said parent transaction,
wherein the one-or more plug-instruments implement an interface that communicates data for the performance metric (emphasis added).

That is, Labadie et al. does not disclose the italicized sections of claim 1, as recited above, and similarly worded sections of claims 15 and 20.

9. Therefore, it is respectfully submitted that Labadie et al. does not disclose, anticipate or inherently teach the claimed invention and that claim 1-12, and claims dependent thereon, patentably distinguish thereover.

Claim Rejections under 35 U.S.C. §103

10. Claims 13 and 14 were rejected under 35 U.S.C. Section 103(a) as being unpatentable over Labadie et al. in view of U.S. Patent No. 7,003,565 (Hind et al.). Claims 12-14 have been canceled by way of the present amendment. Therefore, the outstanding rejection is moot and it is respectfully requested that it be withdrawn.

11. Claims 1 - 9 were rejected under 35 U.S.C. Section 103(a) as being unpatentable over Labadie et al. in view of U.S. Patent Publication No. 2003/0120593 (Bansal). Reconsideration is respectfully requested.

12. As discussed above, claim 15 has been amended to clarify the invention. Claims 16-19 are ultimately dependent upon claim 15. For the same reasons discussed above for claim 1, it is respectfully submitted that Labadie et al. also does not disclose the limitations of claims 16-19.

13. The outstanding Office Action acknowledges other deficiencies in Labadie et al. and attempts to overcome those deficiencies by combining Bansal. However, this Bansal alone cannot overcome all of the deficiencies discussed above for Labadie et al. In particular, Bansal et al. nowhere discloses all of the limitation as recited in claim 15:

installing an instrument hook prior to execution of each of said at least two Java transactions, *wherein a top level transaction of the at least two Java transactions is initiated in response to a request received from a web server and said web server transmits a cookie to an application server together with said request*; and

instrumenting each of said at least two Java transactions upon execution of each of said at least two Java transactions using one or more plug-in instruments called by the instrument hook;

generating a correlator corresponding to said parent transaction, utilizing RMI over IIOP to send said parent correlator incorporated in a header of an IIOP message to said child transaction upon execution;

generating another correlator corresponding to said child transaction; and

generating an additional correlator corresponding to the top level transaction utilizing said cookie, and

wherein the one-or more plug-instruments implement an interface that communicates data for the performance metric.
(emphasis added).

That is, Bansal does not disclose all of the limitations of amended claim 15, as recited above. Thus, Bansal cannot overcome all of the deficiencies of Labadie et al.

14. Therefore, it is respectfully submitted that neither Labadie et al. nor Bansal, whether taken alone or in combination, disclose, suggest or make obvious the claimed invention and that independent claim 15, and claims dependent thereon, patentably distinguish thereover.

15. Claim 20 was rejected under 35 U.S.C. Section 103(a) as being unpatentable over U.S. Patent Publication No. US 2004/0220947(Aman et al.) in view of U.S. Labadie et al. Reconsideration is respectfully requested.

16. Aman et al. discloses workload reporting provided in a distributed transaction processing environment having call trees in which a child application performs a child transaction on behalf of a parent application performing a parent transaction.² In particular, as shown in **FIG. 26**, Aman et al. discloses a procedure **2600** for generating child correlators, wherein the procedure **2600** is performed by the local agent **712** upon receiving notification from a calling application **704**, in the form of an arm_start_transaction() call, of the beginning of a transaction. Further, Aman et al. discloses upon receiving such notification, the local agent **712** constructs a child correlator to be returned to the calling application **704** (step **2602**). Furthermore, Aman et al. discloses that if the calling application **704** passed a parent correlator (step **2604**), the local agent **712** copies the end-to-end information (i.e., the service class and the report class) from the parent correlator to the child correlator (step **2606**). Moreover, Aman et al. discloses the local agent **712** also increments the hop count of the parent correlator by 1 and copies to incremented count to the child correlator (step **2608**) and that the local agent **712** then returns the child correlator to the calling application **704** (step **2610**).

² Aman et al. at ABSTRACT.

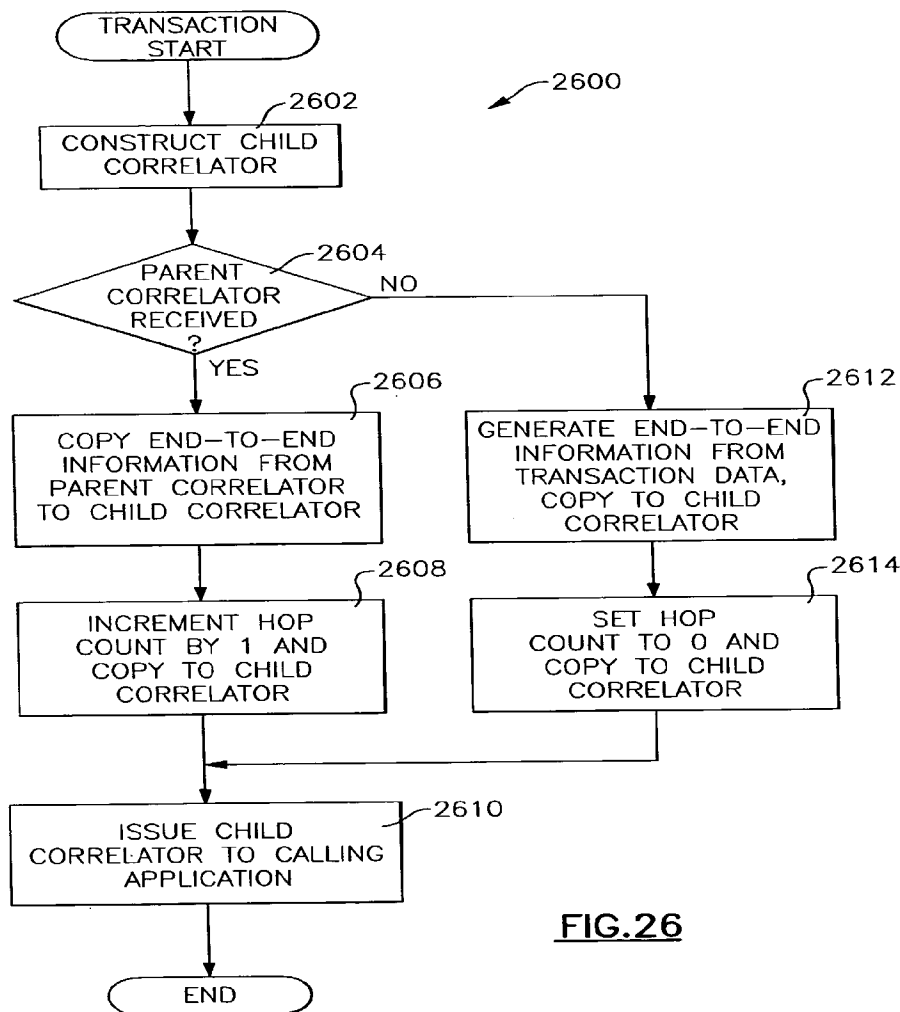


FIG.26

17. However, Aman et al. nowhere discloses as amended independent claim 20, recites:

installing an instrument hook upon loading the selected transaction; and

instrumenting said selected transaction upon execution of the selected transaction using one or more plug-in instruments called by the instrument hook; and

generating correlators for each of said transactions, wherein each correlator identifies a top level transaction and a parent transaction, if any, corresponding to its associated transaction, *wherein said top level transaction is initiated in response to a request received from a web server, and wherein said web server transmits a cookie to an application server together with said request,*

utilizing said cookie to generate said correlator for said top level transaction, and

wherein the one-or more plug-instruments implement an interface that communicates data for the performance metric
(emphasis added).

That is, Aman et al. does not disclose all of the limitations of claim 20, as recited above.

18. The outstanding Office Action acknowledges other deficiencies in Aman et al. and attempts to overcome those deficiencies by combining Labadie et al. with Aman et al. However, claim 20 has limitations similar to amended claims 1 and 15, and, as discussed above, Labadie et al. does not disclose all of the limitations of claims 1, 15 or 20.

19. Thus, Labadie et al. cannot overcome all of the deficiencies discussed above for Aman et al. Therefore, it is respectfully submitted that neither Aman et al. nor Labadie et al., whether taken alone or in combination, disclose, suggest or make obvious the claimed invention and that claim 20 patentably distinguishes thereover.

Dependent Claims

20. As discussed above, the dependent claims incorporate all of the subject matter of their respective independent claims and add additional subject matter which makes them *a fortiori* independently patentable over the art of record. Accordingly, Applicants respectfully request that the outstanding rejections of the dependent claims be reconsidered and withdrawn.

Conclusion

21. In view of the foregoing, this application should be in condition for allowance. A notice to this effect is respectfully requested.

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Respectfully submitted,

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